

CLAIMS

1. An inventory replenishment notification system, the notification system comprising:

a plurality of bin monitors, each of the plurality of bin monitors including a sensor and a transmitter, the sensor monitoring for when a reserve bin is accessed to replenish a primary bin, the transmitter sending bin replenishment information to an inventory control system.
2. The notification system of claim 1 wherein each of the plurality of bin monitors corresponds to one of a plurality of inventory storage devices, and wherein each of the plurality of inventory storage devices includes a primary bin and a reserve bin.
3. The notification system of claim 1 wherein the transmitter comprises a wireless transmitter.
4. The notification system of claim 1 wherein the bin monitor is powered by a battery.
5. The notification system of claim 1 wherein the transmitter comprises a wireless transmitter that transmits to a relay transmitter.

6. The notification system of claim 5 wherein the relay transmitter comprises a wireless receiver and transmitter that receives the bin replenishment information and transmits it to the inventory control system.
7. The notification system of claim 6 wherein the relay transmitter is battery powered.
8. The notification system of claim 1 wherein the inventory replenishment system automates ordering of new inventory when the bin replenishment information is received.
9. The notification system of claim 1 wherein each of the bin monitors includes a data field identifying a component type stored in the corresponding primary bin.

10. A method of updating an inventory control system for an inventory system that includes a plurality of storage devices where each of the plurality of storage devices including a primary bin and a corresponding reserve bin, the method comprising the steps of:

- a) monitoring each of the plurality of inventory storage devices to determine when one of the reserve bins has been accessed to replenish its corresponding primary bin;
- b) transmitting bin replenishment information to the inventory control system when the reserve bin has been accessed to replenish the corresponding primary bin.

11. The method of claim 10 wherein the step of monitoring each of the plurality of inventory storage devices comprises providing a plurality of bin monitors, each of the plurality of bin monitors coupled to one of the plurality of inventory storage devices, each of the plurality of bin monitors including a sensor and a transmitter.

12. The method of claim 10 wherein the step of monitoring each of the plurality of inventory storage devices comprises monitoring each of the plurality of inventory storage devices with a plurality of sensors, each of the plurality of sensors corresponding to one of the inventory storage devices.

13. The method of claim 12 wherein each of the plurality of sensors comprises a battery powered sensor.
14. The method of claim 10 wherein the step of transmitting bin replenishment information to the inventory control system comprises transmitting from a plurality of transmitters, with each of the plurality of transmitters corresponding to one of the plurality of inventory storage devices.
15. The method of claim 14 wherein each of the plurality of transmitters comprises a wireless transmitter.
16. The method of claim 10 wherein the step of transmitting bin replenishment information to the inventory control system comprises transmitting through a wireless transmission to a relay transmitter and re-transmitting from the relay transmitter to the inventory control system.

17. An inventory replenishment notification system, the notification system comprising:

a plurality of battery-powered bin monitors, each of the plurality of bin monitors corresponding to and coupled to one of a plurality of two-bin inventory storage devices, each of the plurality of two-bin inventory storage devices including a primary bin and a reserve bin, each of the plurality of bin monitors including a sensor and a transmitter, and wherein each sensor monitors for when its corresponding reserve bin is accessed to replenish the primary bin and generates replenishment information indicating the replenishment and wherein each transmitter sends its corresponding replenishment information to an inventory control system.

18. The notification system of claim 17 further comprising a plurality of relay transmitters and wherein each transmitter sends its corresponding replenishment information through one of the plurality of relay transmitters to a base station transmitter.

19. The notification system of claim 17 wherein each of the plurality of bin monitors can be accessed through the transmitter to determine a status of the bin monitor.

20. The notification system of claim 17 wherein each of the plurality of bin monitors includes a programmable device, the programmable device controlling the sensor and transmitter.